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ABSTRACT

The Profile of Interaction in the Classroom (PIC) is a feedback method of interaction analysis, based on the Flanders System, created for supervisors of pre-service and in-service teacher education. The Micro-PIC is an abbreviated simplified form for analysis of shorter periods of interaction, particularly in microteaching. The Micro-PIC compresses the first three Flanders categories into one, and also combines categories six and seven. Each category is tallied in a separate column, using the Flanders 3-second rhythm. The Micro-PIC is most useful when the only information required is the ratio of indirect to direct teacher behavior, the ratio of student to teacher talk, or the ratio of self-initiated to response-to-teacher student behavior. When it is necessary to differentiate between the different types of indirect or direct behavior, it would be best to use the PIC; when the sequence of events is of primary importance, the traditional Flanders system is best. (Related to SP 003 936, in this issue.) (RT)

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Micro - PIC

A Simple Form of the Profile of Interaction

in the Classroom

Presented by

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to the

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Micro-PIC

The PIC is a feedback method of Interaction Analysis created especially for teachers and supervisors of instruction for in-service and pre-service training. With the exception of the matrix it affords all the functions of Flanders Interaction Analysis and is intended to present the teacher with a comprehensive, detailed record of as much as 40 minutes of classroom interaction.

There are times, of course, when a record of classroom interaction would be helpful, but neither 40 minutes' worth of data nor a comprehensive analysis is necessary or even possible. For example, supervisors of instruction cannot always remain in the classroom for the entire class period. College supervisors can usually manage only a few visits to each student teacher's classroom and during those visits a profile of pupil-teacher interaction might be only one of several aspects of the student teacher's progress that he would want to observe. Also, with the implementation of Microteaching methods, simulation and role-playing techniques, the need for a very simple method of interaction analysis becomes obvious--one that can be used efficiently for five or ten minutes of interaction and that provides almost instant feedback for discussion. Under these circumstances an abbreviated form of interaction analysis, covering less time and containing fewer data, is warranted. Dr. David Crispin has developed just such a form which he calls the Micro-PIC--a small profile--abrief sample of the teacher-

pupil interaction pattern.

What should be contained in a sample profile of interaction in the classroom? If it cannot perform all the functions of interaction analysis and cannot account for an extended period of time, what should it include?

To be worthy of the name "Interaction Analysis" and to serve appropriately in that tradition, a small profile must include the fundamental concepts and methods. It must contain categories of behavior, account for time, maintain the dichotomies of direct and indirect teacher behavior and self-initiated and response-to-teacher student behaviors, and afford analysis in terms of I/Ds, revised I/Ds and S/Ts. Wherever interaction analysis is used with teachers in classrooms the important factors for analysis and discussion are the ratio of indirect to direct teacher behaviors, the relative amount of time consumed by each of the categories and their sequence of occurence.

While our need is to conserve these dichotomies, our purpose is to abbreviate them, and all that is essential for quick feedback to the teacher of a sample of interaction is the following differentiation of behavior totals:

$\underline{I}$ = 4 plus 1, 2, & 3
$\overline{D}$ = 5 plus 6 & 7
Student = 8 & 9
Revised $\underline{I}$ = 1, 2, & 3
$\overline{D}$ = 6 & 7

And so these become the columns in the Micro-PIC:

MICRO → PIC					
1 - 2 - 3	4	5	6 - 7	8	9
5					
10					
15					
TOTAL					9- | 10-

The Micro-PIC presents the fundamentals of Interaction Analysis. The most frequently occurring teacher behaviors are fours and fives, and columns are provided for each. Ones, twos, and threes are very indirect teacher behaviors, are always totaled together for revised I/Ds, and thus are tallied in the same column. Sixes and sevens are very direct teacher behaviors, are always totaled together for revised I/Ds, and are also tallied in one column. Eights and nines are significantly different student behaviors, so each is given a separate column.

There are three somewhat different methods of marking the Micro-PIC depending upon the purpose for which it is to be used.

The markings employed in the Micro-PIC are the same as those used in the PIC. Tallies (|) represent behaviors and are recorded in the three-seconds-or-faster rhythm. The sequence of events is maintained, although less precisely. The observer always begins at the left near the boundary of the appropriate column and works sequentially towards the right, starting at the top. Each box is approximately one minute wide with space for twenty tallies, and five minutes high or space for five rows of tallies. Except for the first row in each box that contains guide marks the observer makes his own rows by marking his tallies consistently about one quarter of an inch high(Example: ||||) and this far apart. Four such tallies fit comfortably within the guide marks. No more than four tallies are required because the guide marks set off the blocks into quarters, or four groups of five tallies. The fifth tally is made by crossing the other four. (Example: 𝍸) whenever five tallies occur sequentially within the guide marks.

This method does not differentiate between some of the categories. For example, when a tally occurs in the 1-2-3 column, it is impossible to tell the specific type of behavior represented. The same is true

of the 6-7 column and no column at all is provided for Category Ten, silence or confusion. A space for the total of tens has been provided to the right of nine at the bottom of Column Nine. The observer records tens by using the symbol "0" and placing it wherever it occurs after the tally representing the preceding behavior.

In addition to using the symbol "0" for Category Ten, the following may be used; two, for Category Two; three for Category Three; and seven, for Category Seven. The Micro-PIC can then accommodate all ten categories. A tally in Column 1-2-3 would represent a one; a two in the same column would represent a two; and a three, a three. A tally in Column 6-7 would represent a six; and a seven, a seven. This is why the rows and the twenty little guide marks of the PIC have been omitted from the Micro-PIC, to allow room for symbols that require more space than tallies.

The following example includes the ten categories.

MICRO - PIC						
1 - 2 - 3	4	5	6 - 7	8	9	
2 | 23 | |	|| | | 10 | 10	| ||| |	| | 77 |	| | | | |	||| | |	
TOTAL					9-	10-

For purposes of analysis of interaction patterns in terms of I/Ds, revised I/Ds, and S/Ts, the specificity of one, two, and three and six and seven is not necessary. Praise, Category Two, is recorded as a two only when the teacher's behavioral objectives require its tabulation. The same is also true for threes and sevens.

Finally, the basic concepts of Interaction Analysis, I/Ds, revised I/Ds, and S/Ts can be most abbreviated by omitting the sequence. For purposes of certain research designs and special Micro-teaching or simulation experiences, the sequence may not be relevant. Under such circumstances the observer can simply make tallies anywhere in the appropriate columns and boxes. Where only totals are needed for analysis, only tallies in columns need be recorded and the crossing tally (𝍸) will afford the quickest possible tabulation.

Behavioral Objectives, Hypothetical,
Set Forth Categorically in Percentages

	1	2	3	4	5	6	7	8	9	10
PIC		10	10	10	20			30	20	
Micro-PIC										

This form, as well as space for writing instructional objective, is provided on the back cover of the PIC. The teacher writes his instructional objective and fills out the form before the class session to be observed. First he must decide, in terms of his needs and/or the needs of his supervisor, which method is most appropriate , the

PIC or Micro-PIC. Then, in terms of his instructional objective, he projects the interaction by writing in the percentages of the various categories. Since the interaction has not yet occurred, these percentages are hypothetical. During the class session the supervisor records the classroom interaction, computes percentages of each category, and fills in the actual percentages as observed in the appropriate boxes. This affords a quick comparison between what the teacher intended and what actually happened. This analysis of interaction will probably be the major topic of the teacher's conference with his supervisor. Of course, the teacher and supervisor will also want to consider the I/D, the revised I/D and the S?T.

The teacher with the help of the supervisor, must analyze the classroom interaction in terms of this question: "How successful was the teacher in achieving his instructional objective?" This is what teaching is all about and here is where Interaction Analysis can play a significant role toward the improvement of instruction by giving systematic feedback about teaching behavior. Did the teacher behave as he intended? Why not? What was the effect of the teacher's behavior in terms of the prescribed learning task? Did the teacher's interaction pattern bring about the desired results? Would different teaching behaviors effect better results?

When one is doing research involving recording and analyzing teacher-pupil interactions in live school classrooms and has decided to use the Flanders Interaction Analysis, should the full Flanders system be employed or would the PIC or Micro-PIC be more effective? Your choice depends upon your hypothesis and your independent and dependent variables. What is it you expect to look at, to find? When you have delineated your variables and defined them operationally, then determine which method best suits your needs.

Do you need a matrix? Does your hypothesis require the collection of interaction data wherein one tally represents two behaviors, one of which follows the other? Do you need to know the number of interaction occurrences in which a given behavior was followed by any or all the other behaviors you will be recording? If so, you should not use the Micro-PIC method because it cannot afford this information. You probably will not use the PIC method either for even though it does provide this information, a tally in the PIC represents one behavior, not two; these kinds of interaction data are set forth in a matrix. The matrix does not reveal when an interaction occurred.

If your research design does not require the use of a matrix, of if it does require quick feedback of interaction data, you might find that the PIC or Micro-PIC will best serve your purposes. If you need a quick feedback as well as a matrix, the PIC offers both--a matrix can be built from the data in the PIC. If you need quick, almost instant, feedback and you do not need a matrix, perhaps the Micro-PIC will be most appropriate. In the choice between the PIC

and Micro-PIC the crucial question is whether or not you need a clear and accurate presentation of the sequence of interactions. The PIC can preserve the sequence in blocks of 15 seconds, but within 15 seconds the sequence of interactions is not maintained precisely.